UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P O Box 1450
Alexandria, Virginia 22313-1450
www uspto gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,696	03/11/2004	Thomas S. Afferton	Afferton 2003-0075	6182

7590 11/12/2008

Henry T. Brendzel
P.O. Box 574
Springfield, NJ 07081

EXAMINER	
ABDIN, SHAHEDA A	

ART UNIT	PAPER NUMBER
2629	

MAIL DATE	DELIVERY MODE
11/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/798,696	AFFERTON ET AL.	
	Examiner	Art Unit	
	SHAHEDA A. ABDIN	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40,46 and 47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40,46 and 47* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1. The amendment field on 09/04/2008 has been entered and considered by Examiner.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 21-25, and claim 46-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claim 21, the phrase **"a first optical director"** renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention.

Regarding claim 46, the phrase **"corresponding in number to the number of said ODS connection points"** renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 21, and 23-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Sutter et al. (US Patent NO: 5760934).

(1) Regarding claim 21:

Sutter (in Fig. 1 and Fig. 3) teaches a method for provisioning capacity in a network where nodes (plurality of nodes N1-N4) are interconnected with optical links (F1 or F2) comprising the steps of:

at a first node (N1) of said nodes (N1-N4) receiving control signal (i.e. G) (see Fig. 1, and column 10, lines 49-59),

responsive to said control signal (i.e. G) tuning (tuning by tunable filter, see column 10, lines 49-59) a first transceiver pool (i.e. pool of aggregated interface O, note that aggregated interface is a transceiver it has transmitter and receiver pools) that is interposed between at least one customer side port (note that port near to adjacent node is interpreted as CS port, e.g. port at 11 N is consider as a CS port) and N optical director side (MO1 sides) ports (e.g. port at 14S, X1S, 11S,X1N, and X4S) (column 3, lines 40-50 and column 5, lines 30-64), where N is an integer, to deliver (transmit) an (i.e. deliver information-bearing signal $\lambda 4$ from the transceiver pool} to one of said

ODS port (i.e. port at 14S) , which information-bearing signal is at a wavelength signal ($\lambda 4$) that is dictated by said control signals (G) and carries information that is substantially the same as information provided to said transceiver pool (i.e. wave length signal at O) by said CS port (e.g. port at X4N, provided $\lambda 4$ to E) and to accept an information-bearing signal from said ODS port (14S) for delivery to said CS port (11N) ; and

responsive to said control signals (G), directing a first optical director (i.e. ME1) having at least N+2 ports (8 ports, i.e. four transceiver ports and four receiver ports), with N ports connected to said N ODS ports of said first transceiver pool (e.g. port at RS connected to X4S and port at ES connected to 11S)) and remaining ports being coupled to selected ones of said optical links (i.e. F1 and F2) (long-reach ports), to route signals between said ODS port and a specific one of said first optical director (note that ME1 is interpreted as **a first optical director** which has plurality of ports and connection points (see column 6, lines 1-50 and Fig. 2) .

(2) Regarding claim 23:

Sutter teaches where said directing (directing a first optical director ME1) of routing to specific ports (MS and X1N) of said optical director is limited to routing to said long-reach ports (Note that the pool (i.e. E,O) of ME1 corresponding to adjacent node side of a ring network; nodes equipments are connected by optical fibers (F1 and F2);

which is interpreted as long reach optical transmission, see Fig. 2, and column 9, lines 10-35, and see Fig. 2).

(3) Regarding claim 24:

Sutter teaches said control signals (i.e. G) are unrelated to a failure indication (note that the control signal is provided only for controlling the network elements (i.e. nodes) which is unrelated to a failure indication (Fig. 4).

(4) Regarding claim 25:

Sutter teaches that at another node (N2 or N4) of said network (net work in Fig. 2) , Receiving control signals (i.e. G) (see Fig. 3),

Responsive to said control signal (i.e. control signal from G) directing a second optical director (i.e. ME2) that has M ODS connection points (i.e. plurality of connection points at aggregated interface O of ME2) and at least 2 ports, where M is a non-zero integer (note that plurality of connection points at OME2 which is non zero) to route signals (i.e. wavelength) arriving at one of said ports to one of said M ODS connection points (note that the illustration of Fig. 2, it is the node N1, but on the basis of this description of Fig. 2, it can be deduced the construction of the other net work nodes such as N2-N4; since similar scope of limitations are discussed in claim 21 therefore the limitations of claim 25 are rejected based on the same rationale as discussed in claim 21 , column 6, lines 20-23), (also see Fig. 2-5).

tuning a second transceiver pool (i.e. aggregated interface pool of OM2 of node N2) ($\lambda 2$ Filtered) to accept an information-bearing signal ($\lambda 2$) at one of said M ODS connection points (points at O with $\lambda 2$) for delivery to one of a plurality of CS connection points (i.e. pointing arrow towards the adjacent node side) connection point associated with said second transceiver pool (i.e. O of ME2 with $\lambda 2$ Filtered) (Fig. 2 and 3).

(5) Regarding claim 26:

Sutter teaches a method for a network (i.e. network in Fig. 3) that includes nodes (plurality of nodes N2-N4), and links (F1and F2) that interconnect the nodes (plurality of nodes), where a first node (N1) of the nodes executes a process comprising the steps of:

provisioning a tunable transceiver (note that transceiver (i.e. Tx and RN) tuning by tunable optical filter, (e.g. column 2, lines 11-24, and column 10, lines 49- 59) of said first node (N1) to communicate substantially all of the information (i.e. wavelength) of an applied (i.e. transmitted) customer signal to a first bidirectional local connection point (e.g. port at X4 N or X1N which are bidirectional) that is coupled to a first optical director (i.e. ME1) of said first node (N1), which information is modulated onto a wavelength ($\lambda 4$ or $\lambda 1$) specified to said tunable transceiver (see Fig. 2), which control signal is other than indicative of a failure condition (note that the control signal is provided only for controlling the network elements (i.e. nodes) which is unrelated to a failure indication (Fig. 2 and 3).

provisioning said first controllable optical director (i.e. OM1) to transfer signals (e.g.wavelength) at said first local connection point (14N) that have said specified wavelength (i.e. λ4 for RN and λ1 for EN) to a port (e.g. RN or EN) of said first optical director (i.e. OM1) that is specified by a applied (transmitted) to said first optical director (OM1), said transfer being via essentially all-optical communication paths (i.e. fiber F's) within said first optical director (OM1) (see Fig. 2).

(6) Regarding claim 27:

Sutter teaches the communication paths (optical links i.e. F's or F1 and F2) of the optical director (ME!) are all-optical (Fig. 2, and 3).

(7) Regarding claim 28:

Sutter teaches the port (e.g. RN) selected for said controllable optical director (e.g. ME1) is connected to a link (EN) that is coupled to a port (port at O) of a second node (N2, Fig. 3) of said nodes (plurality of nodes N1-N4), where said second node (N2) executes a process comprising the steps of:

provisioning a second optical director (ME2) to transfer signals (λ2) that appear at said port (port at O) of said second node (N2) and have said wavelength (λ2) to a local connection point connection point at of said second node (N2), said transfer being effected via essentially all-optical paths (I.e. F's or F1, F2) in said second director (ME2) (note that the illustration of Fig. 2, it is the node N1, but on the basis of this description of Fig. 2, it can be deduced the construction of the other net work nodes such as N2-N4; since similar scope of limitations are discussed in claim 21 therefore the

limitations of claim 25 are rejected based on the same rationale as discussed in claim 21 , column 6, lines 20-23), (also see Fig. 2-5)

provisioning a tunable transceiver (e.g. EN, RN) of said second node (N2) to form an output signal from a signal that appears at said local connection point (connection point at O of ME2) of said second node (N2) and at said wavelength (λ2) (see Fig. 2-3).

(8) Regarding claim 29:

Sutter teaches the second optical director (i.e. ME2) transfers signals via an all-optical path (I,e, optical fiber F's or F1, F2) (see Fig. 2).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-14, 20, 22 and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al . (US Patent No: 5760934).

(1) Regarding claim 1:

Sutter et al. teaches in Fig. 1, a network arrangement comprising nodes (N1-N4) and optical links (F1, F2) interconnecting the nodes (N1-N4), characterized in that at least one node (i.e. N1, Fig. 2) comprises.

a transceiver pool (i.e. east inter face and west interface of ME1) , that includes a plurality of at least two transceivers (i.e. East west transceiver and receiver EN, RN) with corresponding customer-side (i.e. signal flow toward adjacent Nodes N4 and N2) connection points (e.g. 14N, 11N) , and at least two optical director-side (i.e. signal flow towards MO1 side) connection points (i.e. connection points on MS and 11S in M01) that are each configured to output an optical signal at a particular wavelength (i.e. λ 4 and λ 1) that is specified by an electrical control signal (i.e. control G controlling the electronic nodes N1-N4) (column 5, lines 30-50).

an optical director element (e.g. M01) having bidirectional local input ports (X4N and X1N) , each (X4N and X1N) connected to a different one of said ODS connection points (note that the connection points X4N and XIN is different connection points) , and at least two other ports (e.g. 11S, MS), with said director element (MO1)configured to add a signal applied to one of said local input ports ((11S) by a connected ODS connection point (11S), which is at said particular wavelength (i.e. signal λ 1) , to a specific one of the other ports (MS), via all optical paths(i.e. F1 and F2) (note that signal λ 1 is added in ports 11S and λ 4 is added to port MS) (see the illustration in Fig. 2), pursuant to a control signal (Control signal from G) applied to the optical director

element (MO1), without affecting signals of other wavelengths (λ 4) that are applied by the optical director element (MO1) to said specific one of the other ports (e.g. MS) (see the illustration in Fig. 2) (note that M01 interpreted as optical director element which has two local input ports X1N and X4N and the elements MS and 11s are interpreted as the other ports as to adopt signal λ 4 and λ 1) (column 6, lines 20- 65).

Note that Sutter discloses the electrical control signal but Sutter does not specifically disclose that the electrical control signal is applied to the transceiver. such limitation are obvious in the system of “Sutter”. “Sutter” teaches that “a network comprises a management means G. each of which controls the nodes N1-N4 and more specifically the electronic equipments contained in said nodes (column 5, lines 35-40). The limitations in claim 1 do not define a patentably distinct invention over that in “A” since the invention as a whole and “Sutter” are directed to control signal applied to the nodes with electronics equipment. Therefore, the electrical control signal is applied to the transceiver “Sutter” would have been a matter of obvious choice to one of ordinary skill in the art. In this configuration the system would provide increased data transmission capacity with flexible transmit ion in the network (Sutter, column 3, lines1-12)..

(2) Regarding claim 2:

Sutter teaches each of said links (F1 and F2) interconnects a pair of nodes (i.e. pair of adjacent nodes) and comprise a series connection of at least one optical cable) that contains at least one optical fiber(node F1 and F2 is optical fiber) (column 5, lines 40-51).

(3) Regarding claim 3:

Sutter teaches said control signal (i.e. G) that affects the transceiver pool (i.e. EN, RN) and said control signal (i.e. G) that affects the optical director element (M01) are unrelated to any network fault indication ()note the net work in Fig. 2 is unrelated to any network fault indication) (also see column 5, lines 30-50) .

(4) Regarding claim 4:

Sutter teaches the number of said CS connection points (i.e. two connection points ((e.g. 14N, 11N) towards the adjacent nodes) is equal to number of said ODS connection points (i.e. two points MS, 11) (note that the illustration in Fig. 2, the number of customer side (i.e. node side connection points) connection points is equal to the number of director side (i.e. MO1 side connection points) connection points (i.e. two) (column 4, lines 5-21, column 5, lines 20-67 and Fig. 2).

.

(5) Regarding claim 5:

Sutter teaches transceiver in said transceiver pool (e.g. EN, RN) is configured to deliver to said ODS connection points (14s and 11s) an optical signal (λ 1 and λ 4) that is suitable for long-reach optical transmission (Note that the pool (i.e. E,O) of ME1 corresponding to adjacent node side of a ring network; nodes equipments are connected by optical fibers (F1 and F2); which is interpreted as long reach optical transmission, see Fig. 2, and column 9, lines 10-35). (22).

(6) Regarding claim 6:

Shutter teaches each transceiver (I.e. East transceiver) in said transceiver pool is connected to one of said CS connection points (i.e. 11N), and to one of said ODS connection points (i.e. 11S) (see Fig. 2).

(7) Regarding claim 7:

Sutter teaches a service layer device (i.e. ME1, add-drop multiplexer) that is interposed between customer signals and the CS connection points (note ME1 being interpose between the nodes (i.e. N4- N1-N2) and the CS connection points (i.e. 11N, 14N) (see Fig. 2),

(8) Regarding claim 8:

Sutter teaches transceiver pool (i.e. Pool of ME1) is part of a service layer device (i.e. add-drop multiplexer) (column 6, lines 20-50).

(9) Regarding claim 9:

Sutter teaches said service layer device (ADM ME1) performs a routing, or a multiplexing function (i.e. multiplexing function) (column 6, lines 20-50).

(10) Regarding claim 10:

Sutter teaches a transceiver element (i.e. E) in said pool (i.e. pool of ME1) is configured to transfer information contained in a signal at a CS connection point (i.e. 11N) to a signal of a particular wavelength (λ 1) at an ODS connection point (i.e. 11S) (column 6, lines 20-67, Fig. 2).

(11) Regarding claim 11:

Sutter teaches the signal at its associated CS connection point is electrical (i.e. connection point at adjacent node is electrical because each ME, i.e. ad-drop multiplexer of adjacent nodes, is a n electronics add-drop multiplexer) (column 11, lines 29-49).

(12) Regarding claim 12:

Sutter teaches the signal at its associated CS connection point is optical (e.g. signal at connection point 11N is optical which is an incoming signal via optical fiber, column 11 lines 29-49).

(13) Regarding claim 13:

Sutter teaches a transceiver element (i.e. En) in said pool (ME1) is configured to transfer information to a CS connection point (i.e. point at 11N) that is contained in a signal of a particular wavelength (λ 1) appearing at one of said local ports (i.e. 1N) (see Fig. 2).

(14) Regarding claim 14:

Note that the limitation of claim 14 is discussed in claim 11, see the discussion in claim 11.

(15) Regarding claim 20:

Sutter teaches said transceiver pool (i.e. pool of ME1) is embedded in said optical director (i.e. OM1) (Fig. 2).

(16) Regarding claim 22:

Note that the limitations of claim 22 is discussed in claim 5, only the different is claim 22 is a method claim and claim 5 is an apparatus claim (see the discussion in claim 5).

(17) Regarding claim 46:

Note that the claim limitations are already discussed in claim 1 above, see the discussion in claim 1 . The additional limitation has been recited as bellow and teaches by shutter's reference in such that " a plurality of bi-directional local ports (e.g. ports at X4S, and X1N), corresponding in number to the number of said ODS connection points of said transceiver pool (i.e. O, Fig. 2), each of the local ports (i.e. X4S and X1N) being connected to an ODS connection point, and also having a plurality of bi-directional long-reach ports (i.e. porst at X4N and X1S) , where said optical director element is configured to output signals onto said long-reach ports that are suitable for long-reach optical transmission, and said control signals (i.e. G, column 5, lines 35-40) control routing (directing) of signals entering and leaving said long-reach ports and said local ports (column 6, lines 25-55).

(18) Regarding claim 47:

Sutter teaches where said optical signal (i.e. signal at fiber F) outputted by a transceiver of said transceiver pool (east interface and west interface of ME1) at its ODS connection point (14S or 11S) carries information (e.g. at 14 S wavelength(λ 4) and at 11S wavelength (λ 1)) that is provided by a signal applied to said transceiver at

its CS connection point (i.e. λ 1 at CS point 11 flows towards the adjacent node) , and information that is contained in said optical signal (i.e. signal at the Fiber F) that it accepted at said transceiver's ODS connection point (14N or 11S) is outputted in a signal delivered by said transceiver's CS connection point (e.g. delivered λ 4 towards F2 through the CS point 14N λ 1 towards F1 through the CS point 11N) (column 6, lines 25-55 and Fig. 2 and 3).

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter in view of Way (US. Pub. No: 20060275034 A9).

Regarding claim 15:

Note that Sutter does not teach that optical director comprises switch connected to local input ports; and an optical routing element connected to said other ports.

However, Way in the same field of endeavor teaches the optical director comprises a switch (560) connected to local input ports (574, 572, 570); and an optical routing element (520) connected to said switch (560) and said other ports (578, 576) (see, fig. 6A).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate the optical director with switch, and routing element to connect to the ports as taught by Way in to the net work system of Sutter so that the optical director could be comprising a switch which could be connected to local input ports; and an optical routing element could be connected to the switch and to the other

ports. In this configuration the system would minimize the pass through loss in each fiber of the optical network (Way, [0013]).

10. Claims 18-19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter in view of Liu (US Pub. No: 2002/0149820 A1).

(1) Regarding claim 18:

Note that Sutter does not specifically teach in-band control signals.

However, Liu in the same field of endeavor teaches in-band control signals ([0055], [0139 -0143], Fig. 32 and 33).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate the method of in-band control signal as taught by Liu into the networking system of Sutter so that in-band control signals could be flow through said network to provision nodes of said network. In this configuration the system would have efficient and flexible architecture of switching data transmission in the network (Liu, [0014]).

(2) Regarding claim 19:

Note that Sutter teaches Nodes and control signals and Liu teaches out – band control signals, that flow through the network to provision nodes of the network

(([0055], [0139 -0143], Fig. 4). Thus the reference of Sutter and Liu meet the claim limitations.

13. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al. in view of Gumaste et al. (US Pub. No: 2004/0208560 A1).

(1) Regarding claim 16:

Note the discussion of Sutter above. Sutter teaches a control signal but does not teach the management network. However, Gumaste in the same field of endeavor teaches management network (NMS 44) ([0025], Fig. 1).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a management network system (NMS 44) as taught by Gumaste into the network system of Sutter so that management network can be communicating said control signal. In this configuration the system would be proving an improved method for routing an wavelength assignment with minimizing the various cost functions involved as well as the processing and assignment time needed (Gumaste, [0009]).

(2) Regarding claim 17:

Gumaste teaches Where the management network is distinct from said network (note that management network (NMS 44) is operable to communicate with various network components (various node) and to provide control signals to the various

network components meanwhile said net work is communicating with the adjacent nodes[0025] .

14. Claims 30-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sutter et al. in view of in view of Okanoya et al (US Patent 6128657 A) .

(1) Regarding claim 30:

Note the discussion above in claim 26.

Note that Sutter does not teach the control signals are applied to the first node in response to a request for provisioning.

However, Okanoya teaches the control signals (signal from controller 100) are applied to the first node (10) in response to a request for provisioning (column 6, lines 58-67, column 7, lines 1-8).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a method of control signal as taught by Okanoya into the networking system of Sutter so that the control signal can be applied to the first node in response to a request for provisioning. In this configuration the system would have a high reliability and optimized utilization of resources in the data transmission (Okanoya, column 2, lines 31-31).

(2) Regarding claim 31:

Okanoya teaches the request is initiated by an element (11) of the node (10) (column 7, lines 1-8).

(3) Regarding claim 32:

Okanoya teaches where the request is initiated by a customer (user) (column 6, lines 25-44).

(4) Regarding claim 33:

where the request arrives from another node (e.g. terminal 63) (column 6, lines 58-67, column 7, lines 1-8).

(5) Regarding claim 34:

Okanoya teaches the request arrives from an administrator (100, communication controller centralized management, see column 6, lines 34-44) that has direct control over provisioning of the node (10) (column 6, lines 58-67, column 7, lines 1-8, Fig. 3).

(6) Regarding claim 35:

Okanoya teaches the request arrives from an entity (e.g. network address #A) that has management control (control from controller 100) over the network (column 6, lines 58-67, column 7, lines 1-8, Fig. 3).

(7) Regarding claim 36:

Where the request arrives from said entity (#A) pursuant to a process that rearranges provisioning in the network (column 6, lines 58-67, column 7, lines 1-8).

(8) Regarding claim 37:

Okanoya teaches the rearranging (distribution by processor 112) of provisioning is in response to a request by a customer (user) to provide a modified capacity allocation (column 6, lines 58-67, column 7, lines 1-8).

(9) Regarding claim 38:

Okanoya teaches the rearranging (distribution) of provisioning is in response to changes in network load conditions (column 6, lines 58-67).

(10) Regarding claim 39:

Okanoya teaches the changes in network load conditions arise from network faults (column 18, lines 3265, Fig. 27 and 28) (note that Fig. 3. is illustrated distribution of load sharing; and Fig. 27 and 28 are discussed about load sharing with fault functionality).

(11) Regarding claim 40:

Okanoya teaches the control signals (control signals from controller 100) are applied in response to a fault condition detected in the network (column 18, lines 66-67, column 19, lines 1-11).

Response to Arguments

15. Applicant's arguments with respect to claims 1-40 have been considered but are moot not persuasive.

Applicant further argues that (1) “Sutter’s reference fails to teach bi-directional local input port”, (2) “there is no teaching as to what elements are contained in the small box or within the box marked ME1, so it is not even clear precisely what functions each of the boxes perform,” (3) X1S and X4S are not ports, (4) ME1 and MO1 are not the same element, therefore, ME1 is not corresponds to the optical director (5) X4N, X1N and 11S are tunable filter and not connection points (6) the set of correspondence asserted by the examiner does not fit to the claim limitations.

In response 1, 3 and 5, Examiner respectfully disagree Applicant’s points of view. Note that Sutter’s reference clearly teaches the bi-directional local input as recited in claim 1 “ a director element (i.e. MO1) having bidirectional local input ports (i.e. port at X4N and X1N)”. For example, transmission of the information signals (i.e. λ 1 λ 2 λ 3 λ 4) from the adjacent nodes take place at X4N and XIN , symbolized by double arrows, e.g. signal from X4N towards the west interface O and toward the element 14 N . Therefore Sutter’s reference meets the claim limitation as recited in claim1.

In response 2, Examiner disagree Applicant’s point of view. Note that Examiner introduced figures (i.e. Fig. 1-3 in Sutter’s reference) along with the cited portion as discussed in the claim to teach the claim limitations, Which is apparently clear with the contents of the box or within the box marked ME1 (see the discussion in claim 1) .

In response 4 and 6, Examiner disagree Applicant's point of view. Note that Examine introduced ME1as **a first optical director** which has plurality of ports and connection points and corresponding to the optical director (MO1) (see the discussion in claim 21, also see column 6, lines 1-50 and Fig. 2). Based on claim language Examiner noticed that a first optical director and optical director is distinct from each other. Therefore, Sutter's reference reads on the claim language. Moreover, the set of correspondence asserted by the examiner is appropriate and consistence because Sutter's reference meets the claim limitation (see the discussion above in the rejection portion).

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing

date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

17. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Shaheda Abdin whose telephone number is (571) 270-1673.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard HJerpe could be reached at (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see http://pari-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Shaheda Abdin

11/09/2008

/Richard Hjerpe/

Supervisory Patent Examiner, Art Unit 2629